

Work Order ID 152881***152881***

Page 1

Tuesday, November 08, 2016 8:31:41 AM

Item ID: D350-636-014

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Skidtube RH, Std Wearplates, DART (Apical) Tri-Bag/Air Cruisers Float Comp.

Start Date: 10/26/2016 Start Qty: 1.00

1

Cust Item ID:

Required Date: 11/7/2016 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals:

Process Plan:

DAS

21

Date: NOV 08 2016

Tooling:

Date:

QC:

9-89

Date:

SPC (Y/N):

Date:

Run Start ***NR1***Stop ***NR2***Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

Draw Nbr

Revision Nbr

D2750-044

G

DEC 07 2016

DAS
6
9-89DAS
21
9-89

1612-08

100

Document Control

0.00

100

DOCUMENT CONTROL

DC

Memo

0.00

Doc.Control -USB or Paperwork

record fwd angle:

89.8°

Photocopy blue file and type labels per PPP D350-636-014 CHG 007

DAS
27
9-89

DEC 20 2016

1 16-11-21

DAS
19
9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

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Work Order ID 152881

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152881

Page 2

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Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
110	Skidtubes	0.00							
110									
Skidtubes	Memo	0.00							
Skidtubes	1- Pick D2600-3 Bent								
	2- Deburr FWD and AFT ends, remove bending marks. Scribe batch# inside AFT end per dwg D2750								
	3- Drill pilot holes for blade fitting bolt holes using DT8983. Start with 3/16", then open to 0.500" using center drill then ream holes using 0.500" reamer. PIN first side. Repeat process on second side.								
	ENSURE PROPER POSITIONING FWD BEND MUST BE FACING UP WHEN DRILLING FIRST SIDE								
	Drill pilot holes as per Dwg D2750 sheet 4 (D2750-4 details). Drill using drill Jig DT8150 & DT8864A for second side only DT8864B for first side (detail B)								
	4- Locate DT8329 off of blade fitting bolt holes and drill pilot holes for blade fitting. Open to 0.500" using hole saw. VERIFY AND RECORD FWD BEND ANGLE.								
	6- Drill pilot holes for wearplates as per Dwg D2750 using DT8108 open to 0.297".								
	7- Open up holes of Detail A-A to 0.297" (total of 2 holes per side)								
	8- Weld D2744 Cap as per Dwg D2750 and QSI 004. Fill grooves in bend left from bending as per QSI 004								
	A/R Aluminum Rod batch: <u>M133750</u>								

16-11-21

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="width:12.5%;">Skid-tube ☐</td> <td style="width:12.5%;">Cross tube ☐</td> <td style="width:12.5%;">Water Jet ☐</td> <td style="width:12.5%;">Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																																							
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9- Grind welds flush as per Dwg D2750

BE16-11-21

120

120

QC

Quality Control

QC10- Inspect visual per QSI004- ground welds

0.00

Memo

0.00

<u>1</u>			DAS 38 1-89 NOV 23 2016
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130

130

QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

Memo

0.00

<u>1</u>			DAS 38 9-89 NOV 23 2016
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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐				
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N900040100

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Stop *NS2*

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**Accept
Qty**

Reject
QtyReject
Number

**Insp.
Stamp**

140

Chemical Conversion Coat per QSI005 4.1

0.00

140

HandFinish

Memo

0.00

Hand Finishing

150

QC7-Inspect Chemical Conversion Coat

0.00

150

QC

Memo

0.00

Quality Control

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Work Order ID 152881

Tuesday, November 08, 2016 8:31:41 AM

152881

Page 5

Item ID: D350-636-014

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Skidtube RH, Std Wearplates, DART (Apical) Tri-Bag/Air Cruisers Float Comp.

Start Date: 10/26/2016 Start Qty: 1.00

1

Cust Item ID:

Required Date: 11/7/2016 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

160

0.00

160

Skidtubes

Skidtubes

Skidtubes

Memo

0.00

1-Open up holes using hole saw on section BE-BE 0.500" (4 per side) as per dwg D2750

2-Open holes using hole saw on section BC-BC 0.3125" (4 per side)

3-Open up holes using uni-bit of Detail AB and ground handling to 0.625" (total of 8 holes per side) as per dwg D2750.

4-Chamfer holes of section BE-BE, BC-BC, AB and ground handling (welding instructions on sheet 11)

5-Deburr and blow out all chips from inside of tube. Prepare tube for welding. remove alodine as required.

6-Bond web D2739 in place as per QSI015, let cure for 12hrs.

A/R Sikaflex-291

batch: 13136093exp. date: 17-02-16

ATTN: USE I-BEAM LOCATION AID (BLADE FITTING)

7- Weld spacers D3490-1, D3490-5 and D2743 as per dwg D2750 & QSI004 (welding instructions on sheet 11)

A/R Aluminum Rod

batch: M133750

8-Grind welds flush as per Dwg D2750

9-Spot face ground handling holes (total of 4 places per side) as per dwg D2750

16-11-23

16-11-23

7BE16-11-25

16-11-29

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval	
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

Work Order ID 152881***152881***

Page 6

Tuesday, November 08, 2016 8:31:41 AM

Item ID: D350-636-014

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Skidtube RH, Std Wearplates, DART (Apical) Tri-Bag/Air Cruisers Float Comp.

Start Date: 10/26/2016 Start Qty: 1.00

1

Cust Item ID:

Required Date: 11/7/2016 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
	10-Deburr holes, ensure tube is free of all scratches before sending to paint.								
170	QC10- Inspect visual per QSI004- ground welds	0.00							
170									
QC	Memo	0.00							
Quality Control									DAS 38 9-89 NOV 30 2016
180	QC5- Inspect part completeness to step on W/O	0.00							
180									
QC	Memo	0.00							
Quality Control	***VERIFY C'BOARD IS GOOD***								NOV 30 2016
190	Pressure Wash per QSI005 4.3	0.00							
190									
HandFinish	Memo	0.00							
Hand Finishing	Re-alodine tube as per QSI 005 section 4.1.2.1 do not acid etch.								DAS 41 9-89 16-12-3

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : _____					

Work Order ID 152881***152881***

Page 7

Tuesday, November 08, 2016 8:31:41 AM

Item ID: D350-636-014

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Skidtube RH, Std Wearplates, DART (Apical) Tri-Bag/Air Cruisers Float Comp.

Start Date: 10/26/2016 Start Qty: 1.00

1

Cust Item ID:

Required Date: 11/7/2016 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
200		0.00							
200									DAS
SprayPaint		0.00				1			41
Spray Painting	Memo								9-89
	1- PRIME AS PER DWG AND QSI 005 4.2								16-12-4
	PRIMER PRC DESOTO 515X349 BATCH: <u>135929</u>								
	2- PAINT WHITE AS PER DWG AND QSI 005 4.2								
	PAINT BATCH: <u>136040</u>								
210	QC14- Inspect Spray Paint	0.00							
210									DAS
QC		0.00							15
Quality Control	Memo								9-89
	Inspect for foreign object per QSI 024								

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																											
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																																																								
Description Work Order Deviation				Disposition				Completed By																																																							
2A 15 16								Lead hand / Supervisor Approval Verification																																																							
								QC / QA Coordinator Approval																																																							
Root Cause		FAULT CATEGORY																																																													
Environment ☐	Design ☐	Doc/Data ☐	Equip/Tooling ☐	Handling/Pre ☐	Material ☐	Internal Transport ☐	Tribal Knowledge ☐	LOA ☐	Substation ☐	Past Expiry Date ☐	Misidentified ☐	No Re-verification ☐	Operator ☐	Offset/Setup ☐	Supplier ☐	Training ☐	Use for Testing ☐	Poor Information ☐	Rushing ☐	Product Improvement ☐	Process Improvement ☐	Manufacturing Process ☐	Past Due ☐	Pressure/Forced ☐	Bending ☐	Centre Not Concentric ☐	Cracks ☐	Crimp/Kink/Ripple/Wave ☐	Cuffs ☐	Crushing ☐	Heat Treat ☐	Wave/Twist in Tube ☐	Marks/Chatter ☐	Temperature/Cure ☐	Set-up ☐	BOM/Route ☐	Broken/Damage/Defect ☐	Inspection Incomplete/Unqualified ☐	Contamination ☐	Countersink ☐	Cut Too Short ☐	Instructions Incomplete/Unclear ☐	Drill Holes ☐	Power Loss/Surge ☐	Folio/Program ☐	Grain ☐	Weld ☐	Wrong Stock Pulled ☐	Out of Sequence ☐	Off-set ☐	Mislabeled ☐	Fit/Function ☐	Misaligned/off center ☐	Positioned Wrong ☐	Outside Dimensions ☐	Over/Under tolerance ☐	Part Incorrect ☐	Part Lost/Missing ☐	Part Moved ☐	Drawing ☐	Finish ☐	Misread ☐	Turning Sequence ☐
																							OTHER :																																								

Work Order ID 152881***152881***

Page 8

Tuesday, November 08, 2016 8:31:41 AM

Item ID: D350-636-014

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Skidtube RH, Std Wearplates, DART (Apical) Tri-Bag/Air Cruisers Float Comp.

Start Date: 10/26/2016 Start Qty: 1.00

1

Cust Item ID:

Required Date: 11/7/2016 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals:

Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start

NR1

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

NR2Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

230

0.00

230

HandFinishing

HandFinish

Memo

0.00

Hand Finishing

1-Install inserts as per dwg D2750

2-assemble o'ring as per dwg D3492 and apply o'ring lube
A/R 55-o'ring lube batch: M1354733-Assemble tube hardware as per dwg D2750 sikaflex batch: M136093 17/08

4-Inspect For Foreign Objects

5-Install blade fitting D3488-041, wearshoe

SIKA FLEX 241

BATCH: M136093EXP DATE: 17/086-Assemble o'ring to plug as per dwg D3492 and apply o'ring lube
A/R 55-o'ring lube batch: M135473 RTU 598 M135385 18/10/167-Coat all exposed fasteners with "LPS Procyon" batch: M133690IRM cl 16/12/07

Work Order ID 152881***152881***

Page 9

Tuesday, November 08, 2016 8:31:41 AM

Item ID: D350-636-014**Accept*****N900040100*****Setup Start*****NS1*****Revision ID:****Stop*****NS2*****Item Name:** Skidtube RH, Std Wearplates, DART (Apical) Tri-Bag/Air Cruisers Float Comp.**Start Date:** 10/26/2016 **Start Qty:** 1.00***1*****Cust Item ID:****Required Date:** 11/7/2016 **Req'd Qty:** 1.00***1*****Customer:****Reference:****Approvals:****Process Plan:** _____**Date:** _____**Tooling:** _____**Date:** _____**Run Start*****NR1*****QC:** _____**Date:** _____**SPC (Y/N):** _____**Date:** _____**Stop*****NR2*****Sequence ID/
Work Center ID****Operation
Description****Set Up/
Run Hours****Tool ID****Tool #****Plan
Code****Accept
Qty****Reject
Qty****Reject
Number****Insp.
Stamp**

240

QC5- Inspect part completeness to step on W/O

0.00

240

QC

Memo

0.00

Quality Control

DAS
38
DEC 05 2016

250

Pick Kit

0.00

250

Packaging

Memo

0.00

Packaging

DEC 08 2016

DAS
6
9-89
DAS
28
9-89

260

QC4- 100% Inspect kits for completeness

0.00

260

QC

Memo

0.00

Quality Control

DAS
27
9-89

DEC 20 2016

Work Order ID 152881

Tuesday, November 08, 2016 8:31:41 AM

152881

Page 10

Item ID: D350-636-014**Accept*****N900040100*****Setup Start*****NS1*****Revision ID:****Stop*****NS2*****Item Name:** Skidtube RH, Std Wearplates, DART (Apical) Tri-Bag/Air Cruisers Float Comp.**Start Date:** 10/26/2016 **Start Qty:** 1.00***1*****Cust Item ID:****Required Date:** 11/7/2016 **Req'd Qty:** 1.00***1*****Customer:****Reference:****Approvals:** **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____**Run Start*****NR1*****QC:** _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____**Stop*****NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
270		0.00							
270	Packaging								
Packaging	Memo	0.00							
Packaging	Package as per PPP D350-636-014								
	LOCATION: FG072								
280	QC21- Final Inspection - Work Order Release	0.00							
280									
QC	Memo	0.02							
Quality Control									

DAS DAS
28 27
9-89 9-89

DEC 2 0 2016

DAS
21
9-89

DEC 2 1 2016

DAS
21
9-89

DEC 2 1 2016

Picklist Print

Tuesday, November 08, 2016 8:31:44 AM

Page 1
13

Work Order ID: 152881

152881

Parent Item: D350-636-014

D350-636-014

Parent Item Name: Skidtube RH, Std Wearplates, DART (Apical) Tri-Bag/Air Cruisers Float Comp.

Start Date: 10/26/2016

Required Date: 11/7/2016

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev:H02.09.25Rearranged procedure stepsKJ
IPP Rev:I05.12.08Rearranged procedure stepsEC
IPP Rev:J06.03.30Per rev. D EC
IPP Rev:L 07-07-28 Added SS Wearplates(Rev E) JLM Verified By:EC
IPP Rev:M 08-09-23 revF as per dwg DD verified by:ec IPP Rev:N
10.06.22 revise seq110 DD verf:EC IPP Rev:O 10.10.01 as
per IIN revH DD verf:EC IPP REV:P 13.08.27 PER ECN13-
594 DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

D2600-3-BENT-RH

Manufactured

No

110

Each

9.0000

1

1

D2600-3-BENT-RH

Extrusion Bent RH

**

16-11-16 DJ

Location

Loc Qty

Loc Code

LG002

9

150499

9

D2739

Manufactured

No

160

Each

9.0000

1

1

D2739

350 I Beam

**

16-11-23 DJ

Location

Loc Qty

Loc Code

LG002

9

150718

9

D2743

Manufactured

No

160

Each

134.0000

8

8

D2743

Crossbolt Spacer

**

BE/16-11-24

Location

Loc Qty

Loc Code

LG001

134

147561

8

150407

126

48

Picklist Print

Tuesday, November 08, 2016 8:31:44 AM

Page 2

Work Order ID: 152881

152881

Parent Item: D350-636-014

D350-636-014

Parent Item Name: Skidtube RH, Std Wearplates, DART (Apical) Tri-Bag/Air Cruisers Float Comp.

Start Date: 10/26/2016

Required Date: 11/7/2016

Start Qty: 1.00

Required Qty: 1.00

D2744 Manufactured No 160 Each 22.0000 1 1

D2744

Cap

**

BE16-11-21

Location

Loc Qty

Loc Code

LG001

22

145790

12

150653

10

D3490-1 Manufactured No

160 Each 45.0000 4 4

D3490-1

Cross Bolt Spacer

**

BE16-11-24

Location

Loc Qty

Loc Code

LG001

45

134019

4

150496

41

D3490-5 Manufactured No

160 Each 23.0000 4 4

D3490-5

Cross Bolt Spacer

**

BE16-11-24

Location

Loc Qty

Loc Code

LG001

23

120522

23

ALS4-1032-225 AEIS8-1032-225 Purchased No

230 Each 5,329.000 38 38

AI S4-1032-225

Rivnut

**

16/12/05

Location

Loc Qty

Loc Code

CCK007

5000

M135998

5000

FG

20

M134975

20

FP001

309

M135603

40

M135920

269

Tuesday, November 08, 2016 8:31:44 AM

Shop Packet Print

Page 2

Picklist Print

Tuesday, November 08, 2016 8:31:44 AM

Page 3

Work Order ID: 152881

152881

Parent Item: D350-636-014

D350-636-014

Parent Item Name: Skidtube RH, Std Wearplates, DART (Apical) Tri-Bag/Air Cruisers Float Comp.

Start Date: 10/26/2016

Required Date: 11/7/2016

Start Qty: 1.00

Required Qty: 1.00

AN3C5A Purchased No 230 Each 1,086.000 34 34

AN3C5A

Bolt

**

ll 1612107

Location

Loc Qty

Loc Code

FG 5
122800 5
FP001 396
M135603 396
OVER002 400
M135948 400
ST350 285
M134676 85
M135442 200

M136295

x34

AN3C6A Purchased No 230 Each 197.0000 4 4

AN3C6A

Bolt

**

ll 161

Location

Loc Qty

Loc Code

FG 10
122416 10
FP001 92
m135704 92
OVER002 60
m135442 60
ST349 35
m128704 27
m132767 2
m133077 6

x4

Tuesday, November 08, 2016 8:31:44 AM

Shop Packet Print

Page 3

Picklist Print

Tuesday, November 08, 2016 8:31:44 AM

Page 4

Work Order ID: 152881

152881

Parent Item: D350-636-014

D350-636-014

Parent Item Name: Skidtube RH, Std Wearplates, DART (Apical) Tri-Bag/Air Cruisers Float Comp.

Start Date: 10/26/2016

Required Date: 11/7/2016

Start Qty: 1.00

Required Qty: 1.00

AN6C44A Purchased No 230 Each 384.0000 4 4
AN6C44A ** del 16/12/05
Bolt

Location	Loc Qty	Loc Code
FP001	70	
131649	50	
m132556	20	
over009	314	
m132556	210	
m135718	52	
<u>m135719</u>	52	X4

AN8C35A Purchased No 230 Each 65.0000 1 1
AN8C35A ** del 16/12/05
Bolt

Location	Loc Qty	Loc Code
FG	5	
121275	5	
FP001	30	
m133336	15	
<u>m134130</u>	15	
over005	30	X1
m134131	15	
m134133	15	

D2745 Manufactured No 230 Each 46.0000 8 8
D2745 ** del 16/12/05
Bushing

Location	Loc Qty	Loc Code
FP001	46	B150681
129584	7	X2
136214	2	
145904	37	

Tuesday, November 08, 2016 8:31:44 AM

Shop Packet Print

Page 4

Picklist Print

Tuesday, November 08, 2016 8:31:44 AM

Work Order ID: 152881

152881

Parent Item: D350-636-014

D350-636-014

Parent Item Name: Skidtube RH, Std Wearplates, DART (Apical) Tri-Bag/Air Cruisers Float Comp.

Start Date: 10/26/2016

Required Date: 11/7/2016

Start Qty: 1.00

Required Qty: 1.00

D3488-042

Manufactured No

230

Each

13.0000

1

1

D3488-042

Blade Fitting RH

**

ll 16/12/05

Location

Loc Qty

Loc Code

FP001

13

144738

2

148618

5

150126

6

230

Each

143.0000

8

8

**

ll 16/12/08

D3492-1

Manufactured No

D3492-1

Plug

Location

Loc Qty

Loc Code

FP001

143

148723

12

150701

131

230

Each

165.0000

8

8

**

ll 16/12/05

D3492-5

Manufactured No

D3492-5

Plug

Location

Loc Qty

Loc Code

FP001

165

133396

8

136396

6

138198

2

145446

15

150918

134

B152195

x6

Picklist Print

Tuesday, November 08, 2016 8:31:45 AM

Page 6

Work Order ID: 152881

152881

Parent Item: D350-636-014

D350-636-014

Parent Item Name: Skidtube RH, Std Wearplates, DART (Apical) Tri-Bag/Air Cruisers Float Comp.

Start Date: 10/26/2016

Required Date: 11/7/2016

Start Qty: 1.00

Required Qty: 1.00

D3535-25

Manufactured No

230

Each

15.0000

1

1

D3535-25

Wearplate Center

**

lll 10/12/02

Location

Loc Qty

Loc Code

FG

4

139987

1

148669

1

95077

2

FP002

11

148669

3

150650

8

X1

D3536-25

Manufactured No

230

Each

21.0000

1

1

D3536-25

Gasket Center

**

lll 10/12/05

Location

Loc Qty

Loc Code

FG

6

87053

2

95328

4

FP001

15

146747

2

148849

2

150578

11

X1

Picklist Print

Tuesday, November 08, 2016 8:31:45 AM

Page 7

Work Order ID: 152881

152881

Parent Item: D350-636-014

D350-636-014

Parent Item Name: Skidtube RH, Std Wearplates, DART (Apical) Tri-Bag/Air Cruisers Float Comp.

Start Date: 10/26/2016

Required Date: 11/7/2016

Start Qty: 1.00

Required Qty: 1.00

D3537-1

Manufactured No

230

Each

165.0000

3

3

D3537-1

Wearpad

all 10/12/05

Location

Loc Qty

Loc Code

FG

14

79833

4

88562

10

FP001

150

141922

7

147593

48

150462

34

150709

9

151518

52

ST184

1

125911

1

X3

D3631-1

Manufactured No

230

Each

167.0000

8

8

D3631-1

Washer

all 10/12/05

Location

Loc Qty

Loc Code

FP001

167

147068

7

148837

60

150675

100

X8

D3791-1

Manufactured No

230

Each

8.0000

1

1

D3791-1

Wearpad

all 10/12/05

Location

Loc Qty

Loc Code

FP002

8

148677

8

B150660

X1

Picklist Print

Tuesday, November 08, 2016 8:31:45 AM

Page 8

Work Order ID: 152881

152881

Parent Item: D350-636-014

D350-636-014

Parent Item Name: Skidtube RH, Std Wearplates, DART (Apical) Tri-Bag/Air Cruisers Float Comp.

Start Date: 10/26/2016

Required Date: 11/7/2016

Start Qty: 1.00

Required Qty: 1.00

D3793-1 Manufactured No 230 Each 17.0000 1 1

D3793-1

Wearplate Fwd

**

ll 16/12/05

Location

Loc Qty

Loc Code

FP002

17

148647

5

150194

12

xl

D3793-3 Manufactured No 230 Each 17.0000 1 1

D3793-3

Wearplate Aft

**

ll 16/12/05

Location

Loc Qty

Loc Code

FP002

17

148620

5

150138

12

xl

D3794-1 Manufactured No 230 Each 20.0000 1 1

D3794-1

Gasket Fwd

**

ll 16/12/08

Location

Loc Qty

Loc Code

FP001

20

142770

1

147682

1

150417

6

150695

12

xl

D3794-3 Manufactured No 230 Each 25.0000 1 1

D3794-3

Gasket Aft

**

ll 16/12/05

Location

Loc Qty

Loc Code

FP001

25

147325

1

150181

13

150612

11

xl

Tuesday, November 08, 2016 8:31:45 AM

Shop Packet Print

Page 8

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Tuesday, November 08, 2016 8:31:45 AM

Page 9

Work Order ID: 152881

152881

Parent Item: D350-636-014

D350-636-014

Parent Item Name: Skidtube RH, Std Wearplates, DART (Apical) Tri-Bag/Air Cruisers Float Comp.

Start Date: 10/26/2016

Required Date: 11/7/2016

Start Qty: 1.00

Required Qty: 1.00

MS21043-6 Purchased No 230 Each 80.0000 4 4
MS21043-6 ** 1612108
NUT

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FG	20	
103693	20	M1136047
FP001	2	
m135603	2	
ST302	58	
m134817	28	
m135470	30	

MS21083C8 Purchased No 230 Each 44.0000 1 1
MS21083C8 ** 1612105
Nut

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP001	15	
m135603	15	
ST297	29	
m135297	25	
m135470	4	

Picklist Print

Tuesday, November 08, 2016 8:31:45 AM

Page 10

Work Order ID: 152881

152881

Parent Item: D350-636-014

D350-636-014

Parent Item Name: Skidtube RH, Std Wearplates, DART (Apical) Tri-Bag/Air Cruisers Float Comp.

Start Date: 10/26/2016

Required Date: 11/7/2016

Start Qty: 1.00

Required Qty: 1.00

NAS1149C0332R

Purchased

No

230

Each

4,382.000

38

38

NAS1149C0332R

WASHER

**

el 10/12/16

Location

Loc Qty

Loc Code

FP001

1048

m135672

84

m135948

964

GA

86

m133284

86

ST260a

2072

m135466

1000

m135672

572

m136042

500

ST266

1176

m135408

476

m135766

500

m135908

200

M136199

x38

NAS1149C0832R

Purchased

No

230

Each

126.0000

1

1

NAS1149C0832R

Washer

**

el 10/12/16

Location

Loc Qty

Loc Code

FP001

24

m125807

24

ST265

102

m135536

102

x1

Picklist Print

Tuesday, November 08, 2016 8:31:45 AM

Page 11

Work Order ID: 152881

152881

Parent Item: D350-636-014

D350-636-014

Parent Item Name: Skidtube RH, Std Wearplates, DART (Apical) Tri-Bag/Air Cruisers Float Comp.

Start Date: 10/26/2016

Required Date: 11/7/2016

Start Qty: 1.00

Required Qty: 1.00

NAS1515H3L

Purchased

No

230

Each

179.0000

4

4

***NAS1515H3I ***

Washer

**

del 14/12/16

Location

Loc Qty

Loc Code

FG

40

102472

40

FP001

35

m127831

20

m134508

15

ST260a

100

m135600

100

ST266

4

m130726

4

x4

NAS1611-005

Purchased

No

230

Each

184.0000

8

8

NAS1611-005

O-RING

**

del 16/12/16

Location

Loc Qty

Loc Code

FP001

184

m129198

11

m133498

19

m134816

8

m135465

16

m135706

130

M136184

x8

NAS1611-010

Purchased

No

230

Each

162.0000

8

8

NAS1611-010

O-RING

**

del 16/12/16

Location

Loc Qty

Loc Code

FP001

162

m134955

12

m135603

150

x8

Tuesday, November 08, 2016 8:31:45 AM

Shop Packet Print

Page 11

Picklist Print

Tuesday, November 08, 2016 8:31:45 AM

Page 12

Work Order ID: 152881

152881

Parent Item: D350-636-014

D350-636-014

Parent Item Name: Skidtube RH, Std Wearplates, DART (Apical) Tri-Bag/Air Cruisers Float Comp.

Start Date: 10/26/2016

Required Date: 11/7/2016

Start Qty: 1.00

Required Qty: 1.00

AN8C21A

Purchased

No

250

Each

30.0000

2

2

AN8C21A

Bolt

**

136262

DAS 6 15 DAS 28 9-89 9-89

Location

Loc Qty

Loc Code

FG

4

123966

2

m132169

2

ST332

26

m132169

2

m132522

1

m134590

23

DEC 08 2016

DAS 27 9-89

D2741

Manufactured

No

250

Each

63.0000

1

1

D2741

Replacement Blade

**

DEC 08 2016

DAS 28 9-89

Location

Loc Qty

Loc Code

FG

10

131616

10

ST538

53

132981

15

145632

2

148028

36

DEC 20 2016

DAS 28 9-89

D3493-1

Manufactured

No

250

Each

48.0000

2

2

D3493-1

Washer

**

DEC 08 2016

DAS 28 9-89

Location

Loc Qty

Loc Code

FG

10

97201

10

ST039

38

140678

18

150677

20

153790

DAS 27 9-89

Tuesday, November 08, 2016 8:31:45 AM

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Page 12

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Page 13

Work Order ID: 152881

152881

Parent Item: D350-636-014

D350-636-014

Parent Item Name: Skidtube RH, Std Wearplates, DART (Apical) Tri-Bag/Air Cruisers Float Comp.

Start Date: 10/26/2016

Required Date: 11/7/2016

Start Qty: 1.00

Required Qty: 1.00

MS21083C8

Purchased

No

250

Each

44.0000

2

2

MS21083C8

Nut

**

136047

DAS
6
9-89

DEC 08 2016

DAS
8
89

DAS
27
9-89

Location

Loc Qty

Loc Code

FP001

15

m135603

15

ST297

29

m135297

25

m135470

4

NAS1149D0863J

Purchased

No

250

Each

434.0000

2

2

NAS1149D0863J

Washer

**

DAS
6
9-89

DEC 08 2016

DAS
28
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

FP001

47

125484

47

ST260a

100

125635

100

ST263

287

125268

287

2

Tuesday, November 08, 2016 8:31:45 AM

Shop Packet Print

Page 13

QTY -041	QTY -042	QTY -043	QTY -044	PART NUMBER	DESCRIPTION
X				D2750-041	350 SKIDTUBE ASSEMBLY, LH
	X			D2750-042	350 SKIDTUBE ASSEMBLY, RH
		X		D2750-043	350 SKIDTUBE ASSEMBLY, LH
			X	D2750-044	350 SKIDTUBE ASSEMBLY, RH
1	1	1	1	D2739	WEB
8	8	8	8	D2743	SPACER
1	1	1	1	D2744	CAP
8	8	8	8	D2745	BUSHING
1				D2750-1	SKIDTUBE WELDMENT, LH
	1			D2750-2	SKIDTUBE WELDMENT, RH
		1		D2750-3	SKIDTUBE WELDMENT, LH
			1	D2750-4	SKIDTUBE WELDMENT, RH
1		1		D3488-041	BLADE FITTING, LH
	1		1	D3488-042	BLADE FITTING, RH
4	4	4	4	D3490-1	SPACER
4	4			D3490-3	SPACER
		4	4	D3490-5	SPACER
8	8	8	8	D3492-041	PLUG ASSEMBLY
8	8			D3492-043	PLUG ASSEMBLY
		8	8	D3492-045	PLUG ASSEMBLY
1	1	1	1	D3535-25	WEARSHOE
1	1	1	1	D3536-25	GASKET
3	3	3	3	D3537-1	WEARPAD
8	8	8	8	D3631-1	WASHER
1	1	1	1	D3791-1	WEARPLATE
1	1	1	1	D3793-1	WEARSHOE
1	1	1	1	D3793-3	WEARSHOE
1	1	1	1	D3794-1	GASKET
1	1	1	1	D3794-3	GASKET
38	38	38	38	ALS4-1032-225	INSERT (OR ALS7-1032-225, AKS4-1032-225, AELS-1032-225)
34	34	34	34	AN3C5A	BOLT
4	4	4	4	AN3C6A	BOLT
4	4	4	4	AN6C44A	BOLT
1	1	1	1	AN8C35A	BOLT
38	38	38	38	AN960C10L	WASHER
1	1	1	1	AN960C816L	WASHER
4	4	4	4	MS21043-6	NUT
1	1	1	1	MS21083C8	NUT
4	4	4	4	NAS1515H3L	WASHER

GENERAL NOTES:

- MATERIAL: MAKE D2750-1/-2/-3/-4 FROM D2600-3 EXTRUSION (INITIAL LENGTH = 120.0).
- FINISH: ACID ETCH, ALODINE ASSEMBLY PER DART QSI 005 4.1 PRIOR TO INSTALLING D2739 WEB.
STANDARD: PRIME (REF. 4.2.1.3.3) AND PAINT WHITE PER DART QSI 005 4.2
OPTIONAL: POWDER COAT WHITE (REF. 4.3.5.1) PER DART QSI 005 4.3
BLACK ANTI-SKID PAINT AS INDICATED TO 1.0 ABOVE SKIDTUBE CENTER-LINE PER DART 005 4.4 (OPTIONAL).
- TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- UNITS: INCHES UNLESS OTHERWISE NOTED
- BREAK SHARP EDGES: N/A
- IDENTIFICATION: N/A
- WEIGHT: D2750-041/-042/-043/-044 = 26.5 LBS
- WELD PER DART QSI 004
- INSTALL ALS4-1032-225 INSERTS AFTER FINISH AS INDICATED. DRILL "F" SIZE HOLES (Ø0.297) FOR WEARSHOE INSERTS
- FINAL CONFIGURATION SHOULD HAVE THE FOLLOWING MINIMUM MECHANICAL PROPERTIES:
MINIMUM YIELD TENSILE STRENGTH = 35 KSI
MINIMUM ULTIMATE TENSILE STRENGTH = 35 KSI
- COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF
FINISH WITH MEK DEGREASER.
- SPACER AND PLUG INSTALLED SAME AS SECTION AJ-AJ EXCEPT HORIZONTAL
- SPACER AND PLUG INSTALLED SAME AS SECTION AP-AP EXCEPT HORIZONTAL

SHOP COPY
RETURN TO
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UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 152881 *10-11-08*

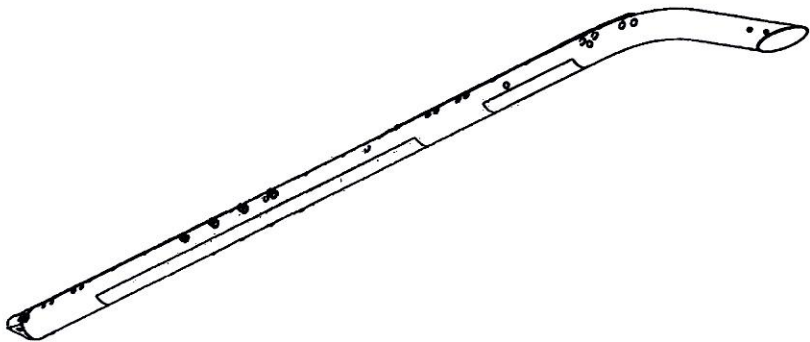
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2013-08-13
W

G	CORRECTED TOLERANCE ON Ø0.500 THRU HOLE: IS +0.010/-0.000, WAS +0.100/-0.000 (ZN B3-4, B2-5); ADD VIEW TO CONTROL FWD BEND ORIENTATION (ZN D-1/-4/-5/-6/-7); UPDATED FINISH OPTIONS; INSIDE OF TUBE NO LONGER SPRAYED WITH LPS-3. REASON: PART13-276 AND NCR13-2757	MB	13.07.11
F	INCORPORATE DSI 8413; QTY (5) D3537-1 WAS QTY (5) (ZN C8-1); D3791-1/-3 REPLACES D3535-13/-35 (ZN C8-1); D3794-1/-3 REPLACES D3536-13/-35 (ZN B8-1); ADD D3791-1 (ZN C8-1); WEARSHOE HOLES UNDER FWD/AFT SADDLE REMOVED (8 PL); WEARSHOE HARDWARE QTY UPDATED (ZN B8-1); D3488-041/-042 HARDWARE UPDATED (ZN C1-8, 9, 10, 11); ADD NOTE 12 AND 13 (ZN A6-1); REASON: REF. NCR 08-043	PH	08.07.16
E	CHANGE TO STAINLESS STEEL WEARPLATES; ADD RUBBER GASKETS; CHANGE INSERTS; ADD D3631-1; REMOVE QTY (38) NAS1515H3L; REMOVE QTY (10) NAS1515H8L; REMOVE D2741; QTY (2) AN960C818; REMOVE QTY (2) MS21083C8	CB	07.05.17
D	ADD HOLES AND SPACERS FOR APICAL FLOATS; INCORPORATE DEC 9133/9157	PH	06.01.05
C	ADD D2750-3/D2750-4; INCORPORATE D2738 AND D2740	CP	98.11.18
B	CHANGE MS24694-S293 TO AN8-16A	CP	98.09.01
A	NEW ISSUE	DS	98.04.16
REV.	DESCRIPTION	BY	DATE
DESIGN	MM	DART AEROSPACE USA, INC.	
DRAWN	B	KENT, WA	
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. G
MFG. APPR.	<i>[Signature]</i>	D2750	SHEET 1 OF 11
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	350 SKIDTUBE ASSEMBLY	NTS
DATE	13.07.11	COPYRIGHT © 1998 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS UNCLASSIFIED AND CONTAINS NO INFORMATION OF A NATURE THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

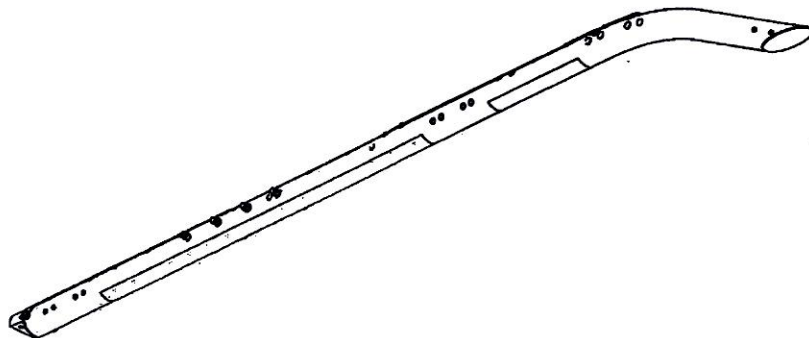
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DART AEROSPACE USA, INC. KENT, WA REV. G DRAWING NO. D2750 SHEET 2 OF 11 SCALE NTS TITLE 350 SKIDTUBE ASSEMBLY COMMENT © 1988 BY DART AEROSPACE USA, INC.													

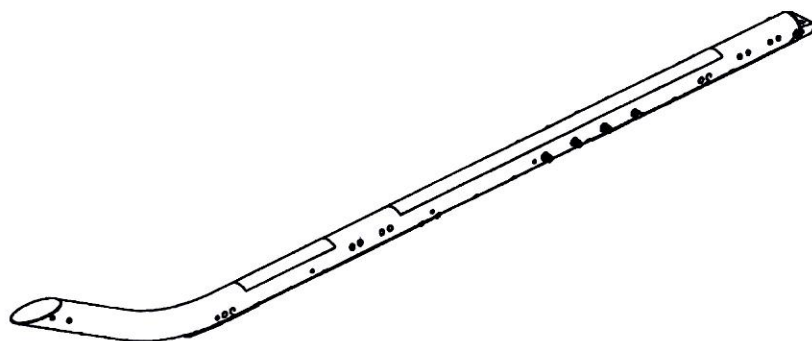
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2013-08-13
MP

D2750-042 350 SKIDTUBE ASSEMBLY, RH

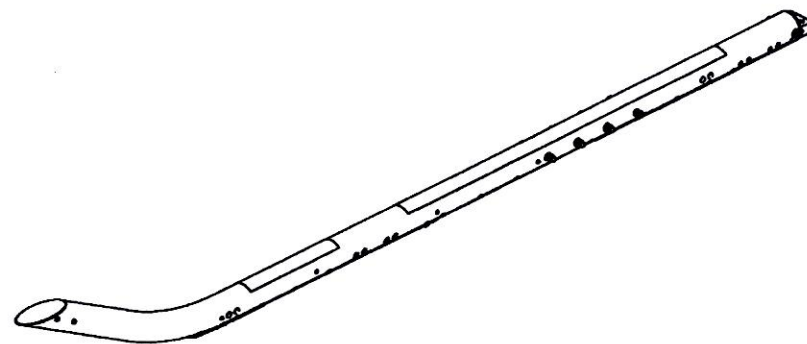


D2750-041 350 SKIDTUBE ASSEMBLY, LH





D2750-043 350 SKIDTUBE ASSEMBLY, LH

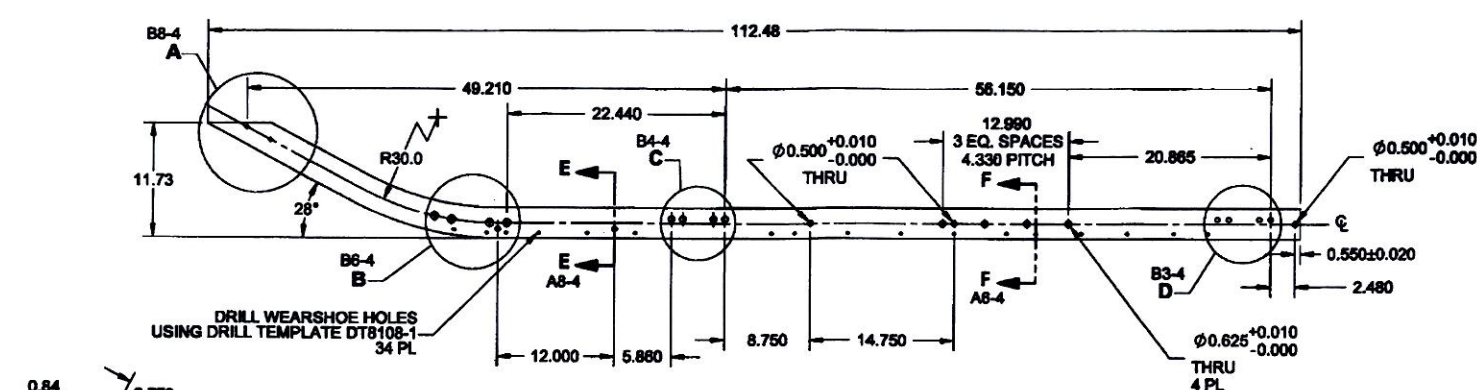


D2750-044 350 SKIDTUBE ASSEMBLY, RH

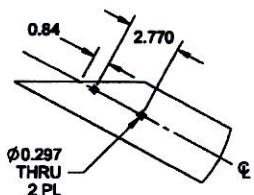
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2013-08-13
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CHECKED	<i>[Signature]</i>	DRAWING NO. D2750	REV. G
MFG. APPR.	<i>[Signature]</i>	SHEET 3 OF 11	
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	350 SKIDTUBE ASSEMBLY	NTS
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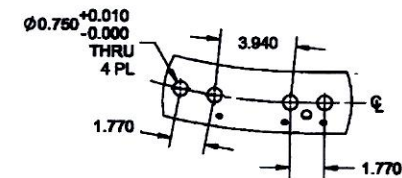
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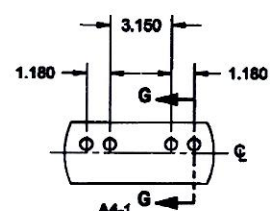
D2750-1 LH SKIDTUBE



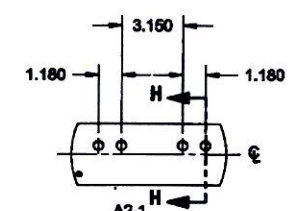
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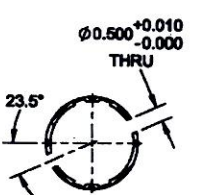
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SCALE 2X



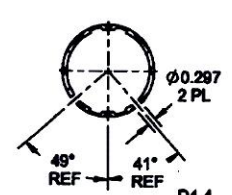
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SCALE 2X



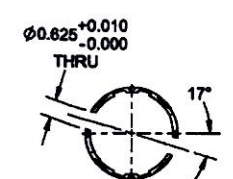
DETAIL D
SCALE 2X



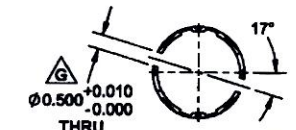
SECTION E-E
SCALE 3X, 2 PL



SECTION F-F
SCALE 3X, 17 PL



SECTION G-G
SCALE 3X, 4 PL

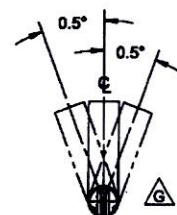
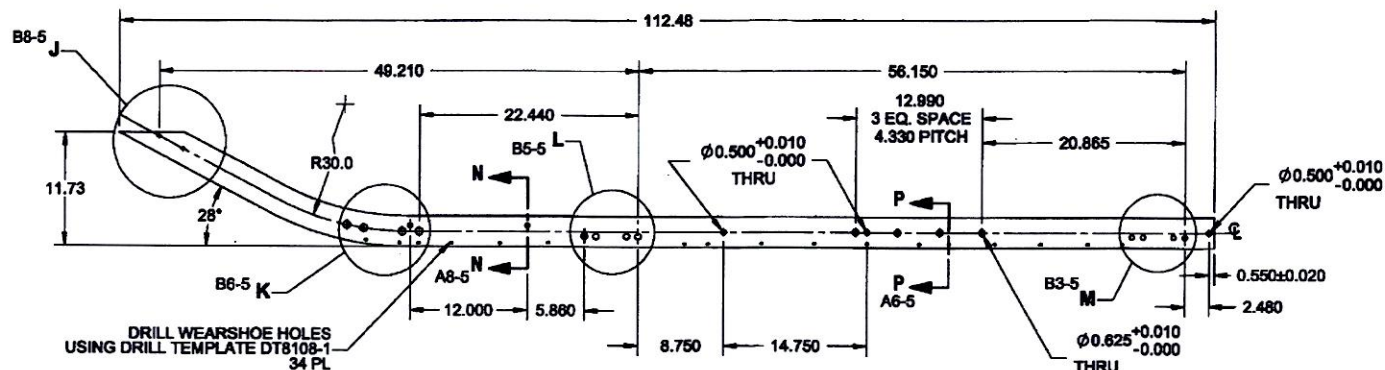


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SCALE 3X, 4 PL

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2013-08-13

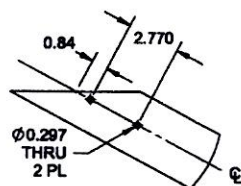
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DRAWN		KENT, WA	
CHECKED		DRAWING NO. D2750	REV. G
MFG. APPR.		SHEET 4 OF 11	
APPROVED		TITLE	SCALE
DE APPR.		350 SKIDTUBE ASSEMBLY	
DATE	13.07.11	NTS	

8 7 6 5 4 3 2 1

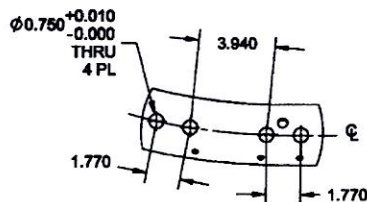


OUTBD
MAX ALLOWABLE
TWIST ON FWD BEND
(VIEWED LOOKING FWD)

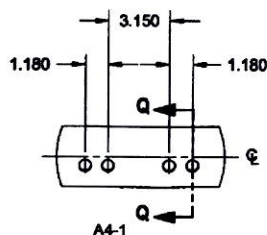
D2750-2 RH SKIDTUBE



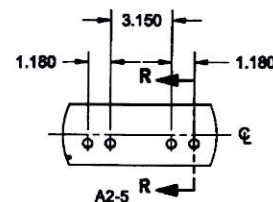
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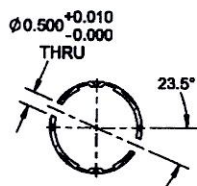
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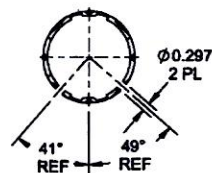
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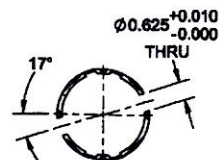
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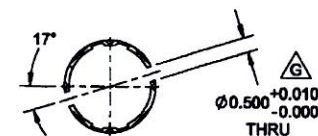
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SECTION P-P
SCALE 3X, 17 PL



SECTION Q-Q
SCALE 3X, 4 PL



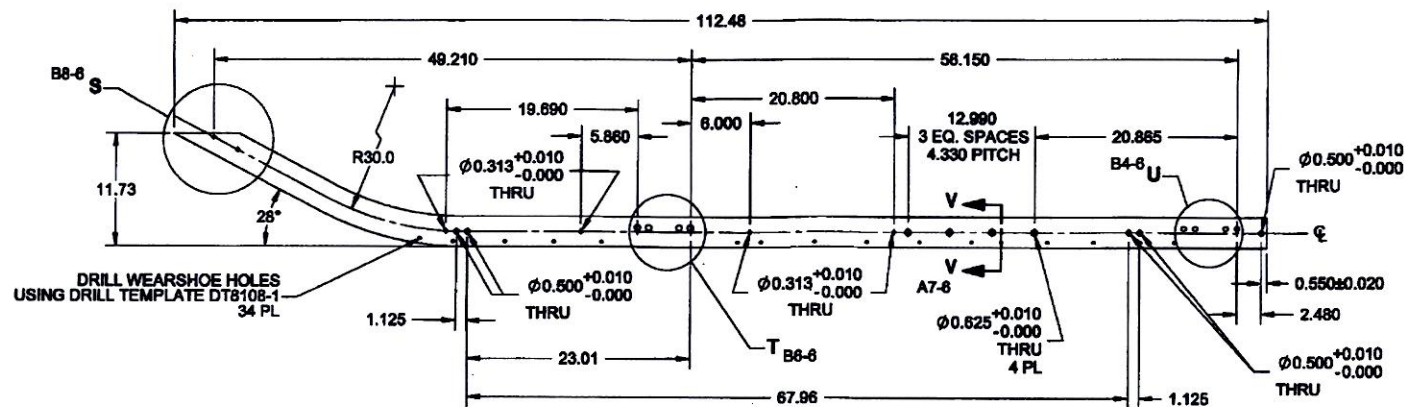
SECTION R-R
SCALE 3X, 4 PL

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DATE	13.07.11	NTS	

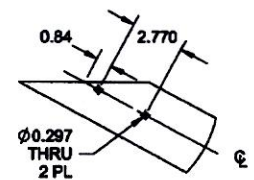
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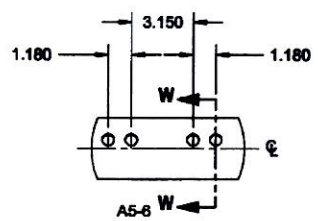
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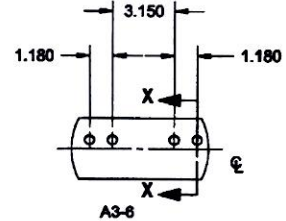
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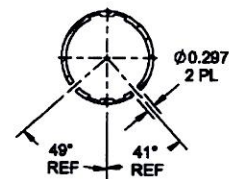
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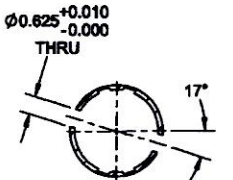
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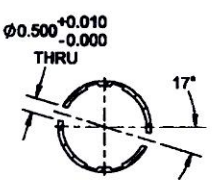
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SCALE 2X



SECTION V-V
C4-6
SCALE 3X, 17 PL



SECTION W-W
B8-6
SCALE 3X, 4 PL



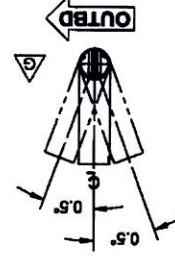
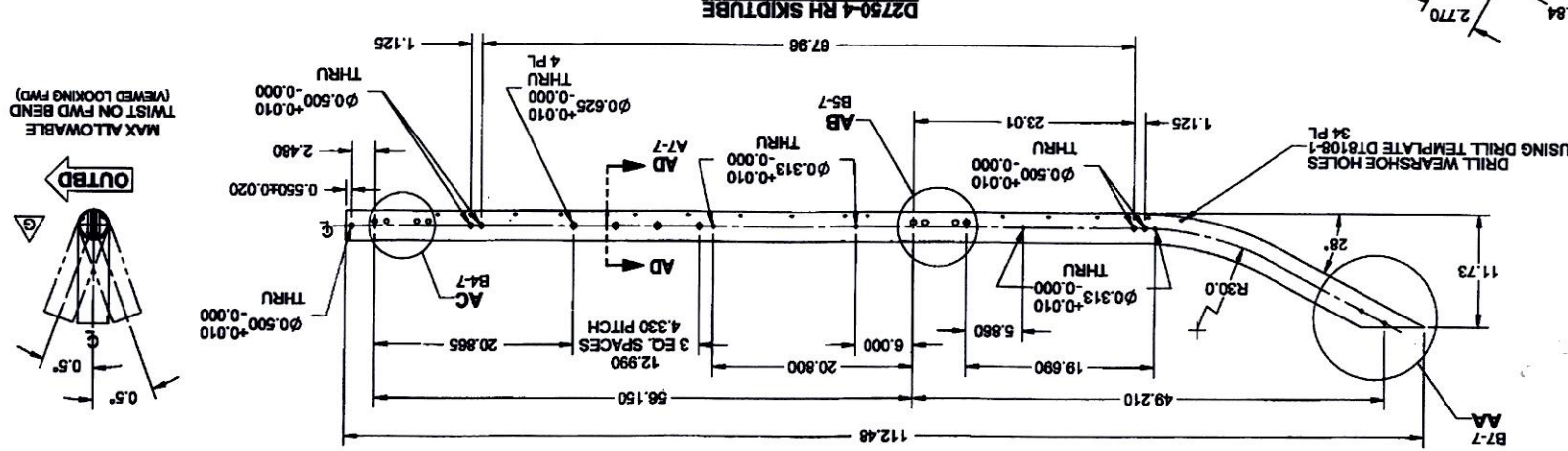
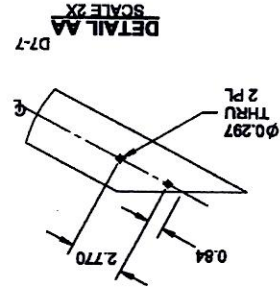
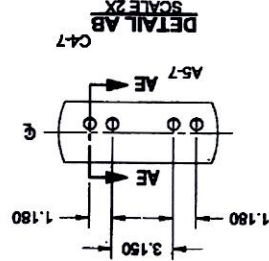
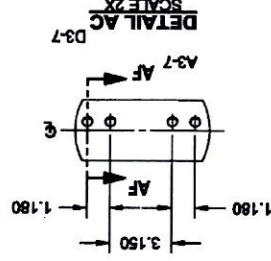
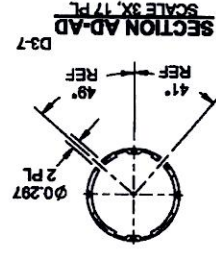
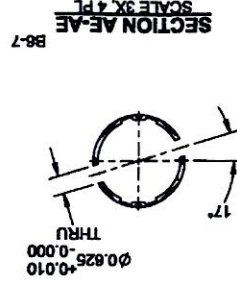
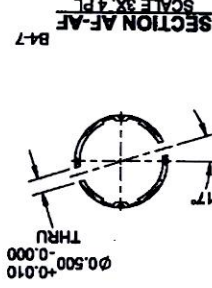
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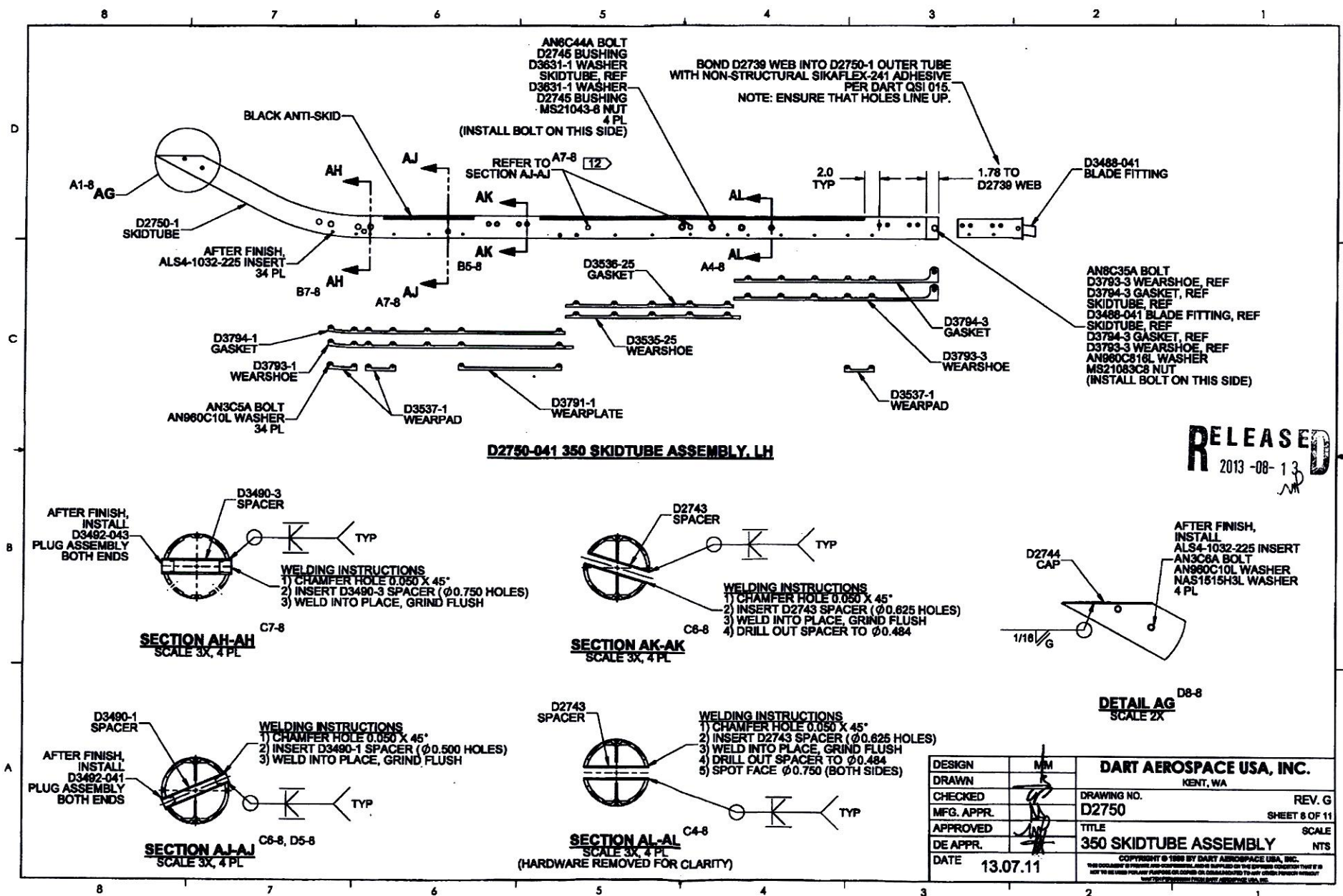
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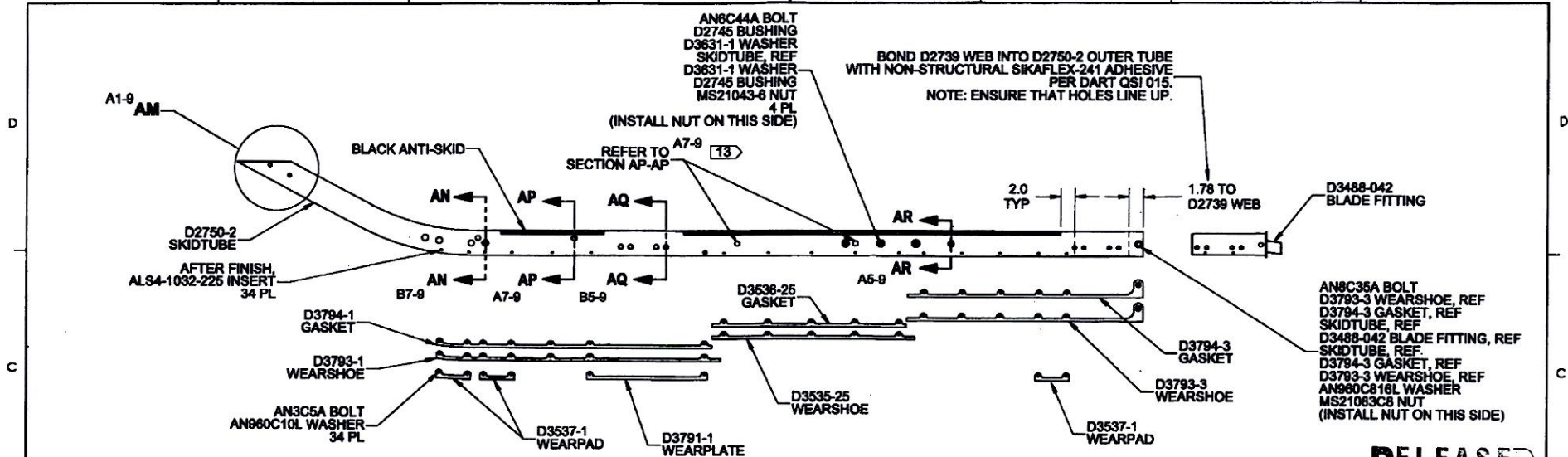


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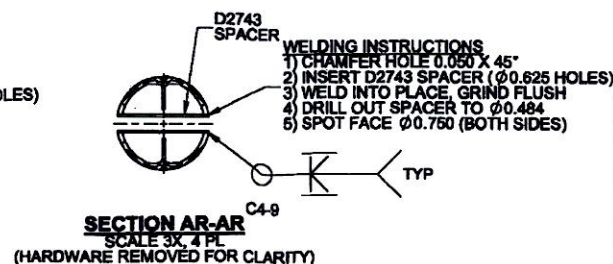
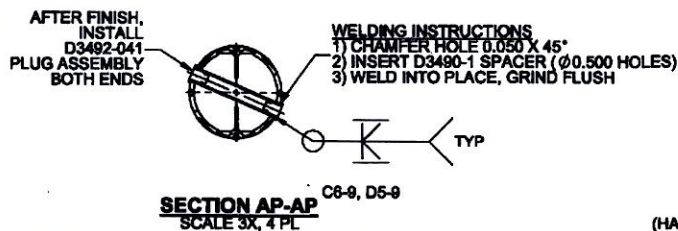
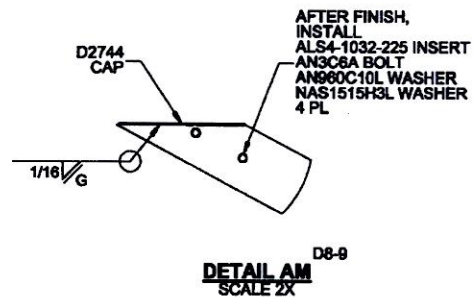
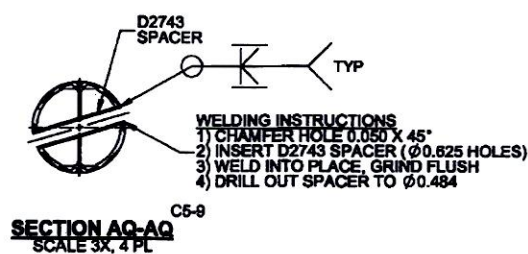
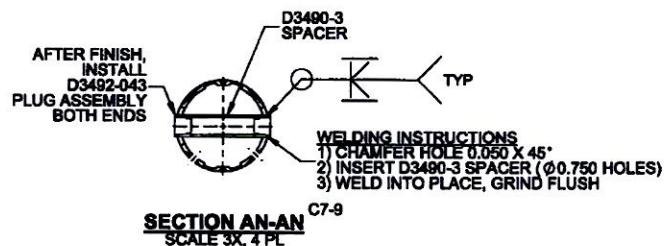
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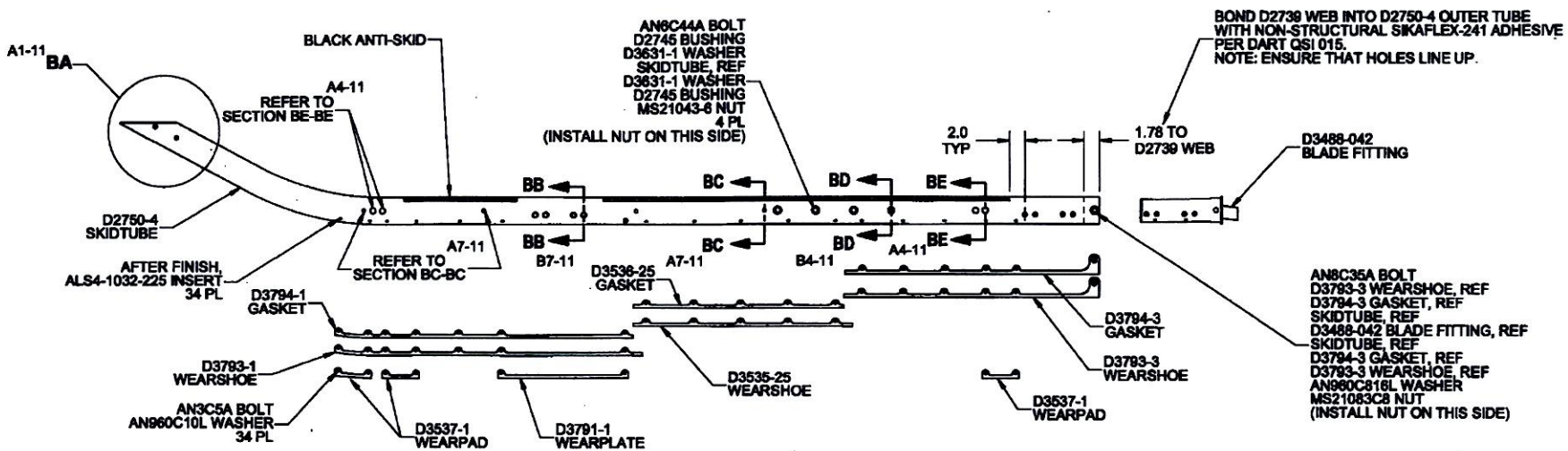
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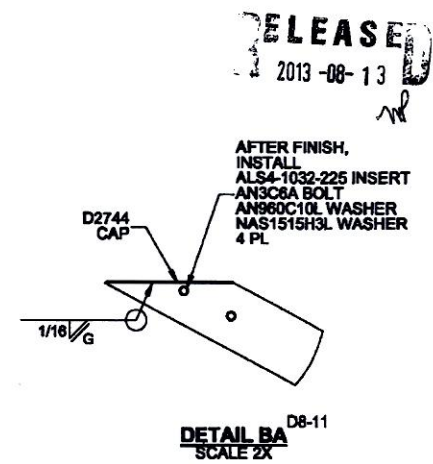
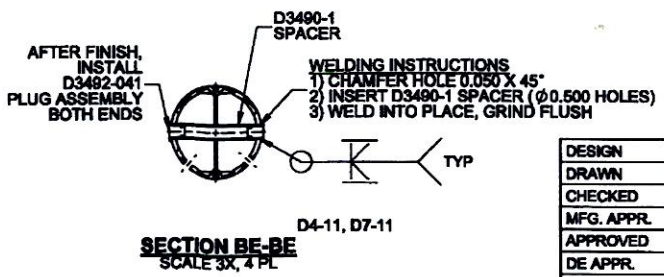
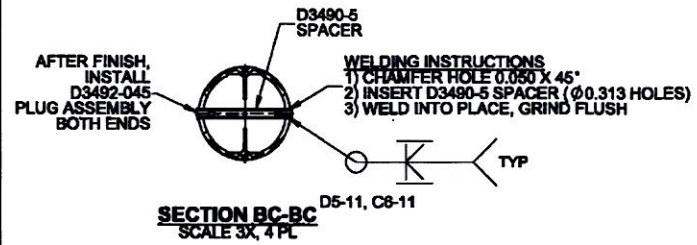
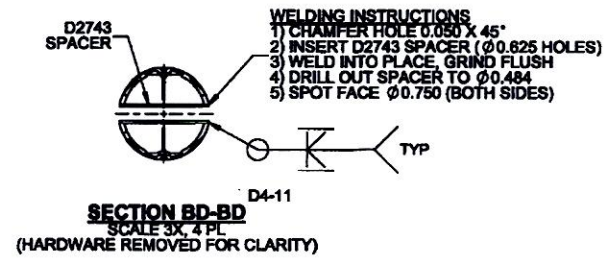
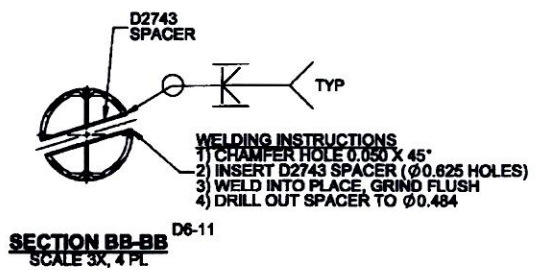


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